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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/616,631	07/26/2000	Thomas Francis McGee III	US 000163	9403

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EXAMINER
WOO, ISAAC M

ART UNIT	PAPER NUMBER
2172	

DATE MAILED: 03/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/616,631	MCGEE ET AL.	
	Examiner	Art Unit	
	Isaac M Woo	2172	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 December 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *5* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. This action is in response to Applicant's request for reconsideration, filed on December 23, 2002 have been considered but are deemed moot in view of new ground of rejections below.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over S. Takao et al (Segmentation and Classification of TV news articles based on speech dictation, Department of Electronics and Informatics, Ryukoku University, September 15, 1999 IEEE, hereinafter, "Takao").

With respect to claims 1, 7, 13, and 19, Takao discloses the apparatus, system, method and computer-executable instructions stored on a computer-readable storage medium for automatically classifying text (text article, page, 94, section VI-I, lines 1-11,

page, 92, section III, lines 1-6), see (page 92, section II, lines 1-24, page 94, section VI, lines 1-26),

text classifier capable of reading text having at least one keyword (page 93, section IV, lines 1-9) contained within at least one story segment, see (page 93, section IV, lines 1-9) within the text, see (page 94, section VI, lines 1-21);

capable of identifying keywords, see (page 93, section IV, lines 1-9, page 94, section VI, lines 1-21) within the text; and

in response to identifying at least one of the keywords within text, see (page 93, section IV, lines 1-9, page 94, section VI, lines 1-21) classifying the line of text as a part of at least one story segment (topic segment, page 95, section VII, lines 1-38) within the text, see (page 95, section VII-II, lines 1-22). Takao discloses identifying keywords in the text, see (page 93, section IV, lines 1-9, page 94, section VI, lines 1-21). Takao does not explicitly discloses identifying keywords "*within each line*" in the text. However, Takao discloses the keywords selection from text article saved on database, see (page, 94, section VI-I, lines 1-21) and classifying each sentence as topic segmentation, see (page 95, section VII 1-38). The sentence is composed of lines. Thus, in order to get keyword from sentences, the system checks each inline of text. Therefore, it would have been obvious a person having ordinary skill in the art the time invention was made to include the identifying keywords "*within each line*" in the text in the system of Takao to identify keyword from the text article. The text classifying mechanism by selecting keyword to represent story segment, uses parsing algorithm of text. In order to classify

text, parsing algorithm is used to examine each line of text. Thus, the classification of text includes the steps of parsing that examines each line of text.

With respect to claim 2, 8, 14 and 18, Takao discloses sequentially comparing first and second lines of text to compare the number of keywords detected for each first line of text with the number of keywords detected for each second line of text, see (page 93, section IV, lines 1-9, page 94, section VI, lines 1-21 and set forth above in claims 1, 7, 13, and 19 with parsing mechanism to read each line of text); and

identifying a keyword transition point between two adjacent portions of text where the number of keywords detected in a keyword category for each line of text (table 4, parameters for topic segmentation on page 95) prior to the keyword transition point (changing threshold for keyword, see page 95, section VII-II, lines 1-22) decreases below a threshold number, see (page 95, section VII-I, lines 1-35, Note: boundary based on threshold numbers of keywords).

With respect to claim 3, 9 and 15, Takao discloses that classifier controller is capable of classifying text between the beginning of the text, see (page 93, section IV, lines 1-9, page 94, section VI, lines 1-21 and set forth above in claims 1, 7, 13, and 19 with parsing mechanism to read each line of text) and a first keyword transition point as one stony segment of the text when the text classifier controller identifies a first keyword transition point, see (page 95, section VII-II, lines 1-35, Note: topic boundary is decided by threshold number of keywords).

With respect to claim 4, 10 and 16, Takao discloses that the text classifier controller is capable of classifying text between a first keyword transition point and a second keyword transition point as one story segment of the text when the text classifier controller identifies a first keyword transition point and a second keyword transition point, see (page 95, section VII, Topic segmentation, VII-I, topic boundary detection, VII-II, topic section detection, same keyword has different association to the different topic, which is on transition point an detects boundary with identifying similarities of each keywords).

With respect to claim 5, 11 and 17, Takao discloses that the text classifier controller is capable of sequentially comparing first and second lines of text to compare the number of keywords detected for each first line of text with the number of keywords detected for each second line of text, (page 93, section IV, lines 1-9, page 94, section VI, lines 1-21 and set forth above in claims 1, 7, 13, and 19 with parsing mechanism to read each line of text) and capable of identifying a keyword transition point between two adjacent portions of text where the number of keywords detected in a keyword category for each line of text prior to said keyword transition point increases above a threshold number, see (page 95, section VII, Topic segmentation, VII-I, topic boundary detection, VII-II, topic section detection, transition (boundary detection based on changing threshold number)).

With respect to claim 6 and 12, Takao discloses that the text classifier controller comprises an algorithm for reading lines of text to identify keywords contained within the lines of text, wherein the algorithm classifies each line of text in a keyword category , see (page 93, section IV, lines 1-9, page 94, section VI, lines 1-21 and set forth above in claims 1, 7, 13, and 19 with parsing mechanism to read each line of text) that has the largest number of keywords in the line of text, see (page 95, section VII, Topic segmentation, VII-I, topic boundary detection, lines 1-38, VII-II, topic section detection, lies 1-27, which teaches the highest classification is based on the number of highest keywords selection from each line of text).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Dimitrova (U.S. Patent No. 6,363,380) discloses the system for story segment retrieval device for a multimedia computer system storing a multimedia signal including a video signal, an associated audio signal and text information as a plurality of individually retrievable story segments, each having associated therewith a finite automaton (FA) model and keywords, at least one of which is associated with each respective node of the FA model. Advantageously, the story segment retrieval device includes a device for selecting a class of FA models corresponding to a desired story segment to thereby generate a selected FA model class, a device for selecting a

subclass of the selected FA model class corresponding to the desired story segment to thereby generate a selected FA model subclass, a device for generating a plurality of keywords corresponding to the desired story segment, a device for sorting a set of the story segments corresponding to the selected FA model subclass using selected keyframes, keywords and query video clips to retrieve ones of the set of the story segments including the desired story segment.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isaac M Woo whose telephone number is (703) 305-0081. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y Vu can be reached on (703) 305-4393. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 308-6606 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

IMW
March 10, 2003

KIM VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100